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10/584,087	08/06/2007	Markus Baumann	095309.57916US	8913

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EXAMINER
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ELNAFIA, SAIFELDIN E

ART UNIT	PAPER NUMBER
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2629

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06/08/2011

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/584,087

Applicant(s)

BAUMANN ET AL.

Examiner

SAIFELDIN ELNAFIA

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 33-64 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-64 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 03/10/2009, 11/03/2007 & 09/06/2007.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Claim Status**

1. Claims 1-64 are pending; claim 33 is independent claim and claims 1-32 have been canceled.

### ***Claim Objections***

2. Claims 31, 37 and 57 are objected to because of the following informalities:
  - The terms “the clockwise” and “should be change to --a clockwise--(claim 33, line 13);
  - The terms “the counter clockwise” and “should be change to --a counter clockwise--(claim 33, line 16);
  - The terms “the individual” and “should be change to --an individual--(claim 34, line 2);
  - The sign “.” before the should be deleted (claim 35, line 1);
  - “a” should insert before the term “fourth” (claim 38, line 2);
  - The term “a display” should change to --the display—(claim 44, line 2);
  - The number 25 should be deleted (claim 45, line 3);
  - The “an” should be deleted (claim 52, line 2);
  - The terms “a field” and “a cursor” (claim 63, line 1 and 2) should read “the field” and “the cursor” in reference to the elements in the depended claim.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

**3.** The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**4.** Claims 33-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Goldenberg (US 6,636,197).

**Regarding claim 33**, Goldenberg teaches a control system for a motor vehicle (fig. 1, col. 4 and lines 1-4), comprising:

a manual actuating means with a plurality of degrees of freedom of adjustment for at least one of selecting and activating entries in a menu structure with a plurality of menu levels (fig. 1, # 12 and col. 3, line 66 to col. 4, line 20); and

a screen display having a plurality of display areas for displaying the menu structure, the display areas each comprising at least one field for displaying one of the entries (fig. 1, # 14, col. 4 and lines 47-63);

Wherein at least two degrees of freedom of adjustment of the manual actuating means move a cursor in order to at least one of select and activate one of the entries in an active display area (fig. 1, col. 5 and lines 29-46);

a first degree of freedom of adjustment corresponds to a rotational movement of the manual actuating means in the clockwise direction about a z axis which is perpendicular to an xy plane, a second degree of freedom of adjustment corresponds to a rotational

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movement of the manual actuating means in the counter clockwise direction about the z axis (col. 5, lines 18-28 and col. 25, lines 33-56);

A direction of movement of the cursor in the active display area which is brought about by at least one of the first and second degree of freedom of adjustment of the manual actuating means is dependent on the orientation of the entries displayed in the active display area (col. 25 and lines 33-56).

**Regarding claim 34**, Goldenberg teaches the control system as claimed in claim 33, wherein at least one of the individual display areas and the fields with the entries are arranged with a vertical orientation in a y direction and/or with a horizontal orientation in an x direction in the individual display areas on the screen display (fig. 1, # 22, for example volume or list).

**Regarding claim 35**, Goldenberg teaches the control system as claimed in claim 34, wherein when: the entries are oriented vertically in the active display area, the first degree of freedom of adjustment brings about a movement of the cursor in the negative y direction, and the second degree of freedom of adjustment brings about a movement of the cursor in the positive y direction (fig. 1, # 32, col. 5 and lines 29-46).

**Regarding claim 36**, Goldenberg teaches the control system as claimed in claim 34, wherein when the entries are arranged horizontally in the active display area, the first degree of freedom of adjustment brings about a movement of the cursor in the positive x direction, and the second degree of freedom of adjustment brings about a movement of the cursor in the negative x direction (fig. 1, # 32, col. 5 and lines 29-46).

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**Regarding claim 37**, Goldenberg teaches the control system as claimed in claim 36, wherein at least four further degrees of freedom of adjustment of the manual actuating means move the cursor in order to at least one of select and activate at least one of the display areas and the entries in the active display area on the screen display, the direction of movement of the cursor on the screen display corresponding to an instantaneous actuation direction of the manual actuating means which is actuated in accordance with one of the four further degrees of freedom of adjustment (fig. 1, # 32, col. 5 and lines 29-46).

**Regarding claim 38**, Goldenberg teaches the control system as claimed in claim 37, wherein the four further degrees of freedom of adjustment include a third and fourth degree of freedom of adjustment corresponds to a pushing movement of the manual actuating means in the positive or negative y direction (fig. 1, # 32, col. 5 and lines 29-46).

**Regarding claim 39**, Goldenberg teaches the control system as claimed in claim 38, wherein the four further degrees of freedom of adjustment include a fifth degree of freedom of adjustment and a sixth degree of freedom of adjustment corresponds to a pushing movement of the manual actuating means in the positive or negative x direction (fig. 1, # 32, col. 5 and lines 29-46).

**Regarding claim 40**, Goldenberg teaches the control system as claimed in claim 39, wherein the pushing movement of the manual actuating means for at least one of selecting and activating one of the entries within the active display area corresponds to the orientation of the entries in the active display area (col. 6 and lines 16-55).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 41-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldenberg (US 6,636,197).

**Regarding claim 41**, Goldenberg teaches the control system as claimed in claim 40, wherein, in order to exit the active display area, the pushing movement of the manual actuating means is orthogonal with respect to the orientation of the entries in the active display area (Fig. 1, col. 4, lines 47-63, col. 15, lines 3-8), but does not specifically disclose in order to exit the active display area, the pushing movement of the manual actuating means is orthogonal with respect to the orientation of the entries in the active display area. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made that after switching of the options or menus with respect to the figure 1, the manual actuating device would be adjusted upward, orthogonal to the orientation of the displayed entries of modes for exiting the active display area. It is also a known technique for navigating between different menus or workspace in various directions depending on the orientation of the displayed entries that is a matter of design choice on how the entries on display areas are being oriented.

**Regarding claim 42**, Goldenberg teaches the control system as claimed in one of claims 41, wherein the activation of that selected entry of the active display area which

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is assigned to an application or a function or a subfunction or an option is carried out by means of a seventh degree of freedom of adjustment of the manual actuating means (col. 24, lines 46-55 and col. 25, lines 33-56).

**Regarding claim 43**, Goldenberg teaches the control system as claimed in claim 42, wherein the activation of the entry in one of the display areas which is assigned to a status display is carried out as a function of a current system state which is determined by a control and evaluation unit and is determined by evaluating signals of vehicle systems (fig. 3, the combination of 202, 224, col. 11 and lines 1-24).

**Regarding claim 44 and 45**, Goldenberg does not specifically disclose when there are a plurality of entries in a display area, the width of the individual fields when the entries are arranged horizontally is dependent on the length of the respective entry, and when the entries are arranged vertically said width is dependent on the length of the longest entry; and the field width when the entries are arranged horizontally is dependent on the number of entries to be displayed in this display area. However, it is a matter of obvious design choice for one of ordinary skill in the art to arrange and adjust the width of the fields by the length of the entry and by the number of entries to provide complete view of each entry of each field or to provide all entries for view on the display. These are well known and common presentation methods for view ability and layouts.

**Regarding claim 46**, Goldenberg teaches the control system as claimed in claim 45, wherein the screen display has at least a first display area with a constant graphic basis structure over all the menu levels of the menu structure (fig. 1, 3 14).



**Regarding claim 47**, Goldenberg teaches the control system as claimed in claim 46, wherein the screen display has at least a second display area with a graphic basis structure which is variable as a function of an active menu level of the menu structure (fig. 1, # 14).

**Regarding claim 48**, Goldenberg teaches the control system as claimed in claim 47, wherein, in order to display a first menu level of the menu structure on the screen display, a plurality of separate, vertically arranged display areas, at least one of which can be activated, are provided (fig. 1, col. 4, lines 1-20 and 47-63).

7. Claims 49-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldenberg (US 6,636,197), and further in view of Matsumoto (US 2002/0007487).

**Regarding claim 49-53**, Goldenberg does not specifically disclose when an entry of an active display area is activated in the individual menu levels of the menu structure, a submenu which is dependent on the activated entry is opened in at least one further level of the menu structure, and by activating at least one of the display areas it can be displayed in said area; an opened submenu can be displayed in the active display area and in at least one other of the display areas by means of an overlap of the graphic basic structure; wherein a plurality of the submenus are displayed simultaneously on the screen display in the at least one further submenu of the menu structure; wherein, the plurality of submenus can be displayed with entries orientated vertically one next to the other; and wherein, a first of the plurality of submenus is opened and displayed in the first menu level of the menu structure as a function of an activation of an entry, and a second of the plurality of submenus is opened and displayed as a function of an

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activation of an entry in the associated first submenu. Matsumoto discloses a display having display areas a submenu dependent on the activated entry is opened in at least one further level of the menu structure and can be displayed in said area, an opened submenu can be displayed in the active display area and in at least one other of the display areas by means of an overlap of the graphic basic structure; a plurality of the submenus are displayed simultaneously on the screen display in the at least one further submenu of the menu structure; wherein, the plurality of submenus can be displayed with entries orientated vertically one next to the other; and wherein, a first of the plurality of submenus is opened and displayed in the first menu level of the menu structure as a function of an activation of an entry, and a second of the plurality of submenus is opened and displayed as a function of an activation of an entry in the associated first submenu (Fig. 9-14, paragraph 0054-0060). It would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the teaching of Goldenberg and Matsumoto to provide desirable submenus layouts according to multiple hierarchical levels.

**8.** Claims 54-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldenberg (US 6,636,197), in view of Matsumoto (US 2002/0007487), and further in view of Volkel (US 6,104,399).

**Regarding claim 54,** Goldenberg discloses switching and navigating between different menus and display areas (Fig. 1) but does not specifically disclose all the opened submenus are closed simultaneously by means of a pushing movement of the manual actuating device orthogonally with respect to the orientation of the entries of the active

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submenu away from the adjacent submenu, and in that only the active submenu is closed by means of a pushing movement of the manual actuating device orthogonally with respect to the orientation of the entries of the active submenu in the direction of the adjacent submenu, and the adjacent submenu is activated for a new selection of an entry. Matsumoto discloses expanding submenus in a direction (Fig. 9-11). It would have been obvious and known technique that when pushing the manual actuating device to the opposite, orthogonal direction with respect to the orientation of the entries of the active submenu, all the opened submenus will be closed simultaneously. Volkel discloses navigating between upper and lower submenus by pushing button at the direction opposite to the orientation of the active entries and closing all opened submenus entries (Fig. 2, col. 3, lines 10-45). It would have been obvious for one of ordinary skill in the art to combine the teachings of Goldenberg, Matsumoto, Volkel and known techniques of navigating menu entries to close all opened submenus by pushing movement of the manual actuating device orthogonally with respect to the orientation of the entries of the active submenu in the direction of the adjacent submenu for conveniently and quickly provide relevant menu options and entries.

**Regarding claim 55**, Goldenberg teaches the control system as claimed in claim 54, wherein at least one of the number, the graphic display and contents of the entries to be displayed in the display areas are variable and/or constant as a function of at least one of current system states, a current menu level and a currently activated application (fig. 1, col. 4, lines 1-20 and 47-63).

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**Regarding claim 56**, Goldenberg teaches the control system as claimed in claim 55, wherein a presettable application can be displayed in at least one of the first display areas, the number and the position of the entries to be displayed being constant as a function of the preset application, and the contents and the graphic display of the entries to be displayed being variable and/or constant as a function of current system states (fig. 1, 3 14).

9. Claims 57-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldenberg (US 6,636,197), in view of Matsumoto (US 2002/0007487), in view of Volkel (US 6,104,399), and further in view of Rosen (US 7,111,254).

**Regarding claim 57**, Goldenberg in view of Matsumoto, in view of Volkel does not specifically disclose at least one of the first display areas is configured as a status bar with at least one horizontally arranged field for displaying at least one status, the number, the position, the contents and the graphic display of the entries to be displayed being variable as a function of current system states and application states. However, it is well known in the user interface art to provide a status bar for presenting current states, active contents and various other information with respect to the current active application for providing useful information to the user. Rosen discloses a status bar for applications that displays current state and other information (Fig .6, 7, col. 15, lines 18-30).

**Regarding claim 58**, Goldenberg teaches the control system as claimed in claims 57, wherein at least one of the first display areas is configured as an application line for displaying an application group with various selectable and predefinable applications

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including an audio application, navigation application, communications application, video application and vehicle application, the number and position of the entries to be displayed being constant, and the graphic display of the entries to be displayed being variable as a function of an activated application (fig. 1, col. 4 and lines 47-66).

**Regarding claim 59**, Goldenberg teaches the control system as claimed in claim 58, wherein at least one of the second display areas is configured as an application area for displaying details and controlling a selected and activated application, the number and the position and the graphic display of the entries to be displayed being dependent on the activated application (fig. 1, col. 4 and lines 47-66).

**Regarding claim 60**, Goldenberg does not specifically disclose the control system as claimed in claim 59, wherein at least one of the first display areas is configured as a subfunction line for displaying and selecting at least one of functions and subfunctions and options of an activated application, the number and the position and the graphic display of the entries to be displayed being dependent on the activated application.

Matsumoto discloses one of the first display areas is configured as a subfunction line for displaying and selecting at least one of functions and subfunctions and options of an activated application, the number and the position and the graphic display of the entries to be displayed being dependent on the activated application (Fig. 8-11). It would have been obvious for one of ordinary skill in the art at the time the invention was made to combine the teaching of Goldenberg and Matsumoto present subfunctions and options dependent on the activated application for conveniently display relevant and available functions and options of the activated application.

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**10.** Claims 61-64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldenberg (US 6,636,197), in view of Matsumoto (US 2002/0007487), in view of Volkel (US 6,104,399), in view of Rosen (US 7,111,254), and further in view of Iesaka (US 2003/0201971).

**Regarding claims 61 and 64,** Goldenberg does not specifically disclose a graphic display of the cursor is variable as a function of at least one of the active display area and of an active application and an active menu level; at least one of a colored display and a shape and a size of the cursor can be changed as an independently graphically displayed object on the screen. However, it is well known in the art to have a variable graphic display including different color, shape and size of cursor while the cursor is in an active display area, field, options or menu item, for example when a cursor is on a hyperlink for representing the activities and options of the cursor available that is a matter of design choice to assign appropriate and easy to understand cursor activities to indicate functions and actions. Iesaka discloses changing the appearance of a cursor including the shape, size and color with respect to different display area of an active application (Fig. 11, paragraph 0072).

**Regarding claim 62,** Goldenberg teaches the control system as claimed in claim 61, wherein the cursor can be displayed graphically as an independent object on the screen display or by changing the graphic display of a currently selected field (fig. 1, col. 2 and lines 27-36).

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**Regarding claim 63**, Goldenberg teaches the control system as claimed in claim 62, wherein a field which is selected with a cursor changes at least one of field color, shape and size (col. 5 and lines 47-56).

### ***Conclusion***

**11.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAIFELDIN ELNAFIA whose telephone number is (571) 270 5852. The examiner can normally be reached on M-F 8:00 ARE to 5:00 PMEST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RICHARD HJERPE can reach on (571) 272 7691. The fax phone number for the organization where this application or proceeding is assigned is (571)273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or public PAIR. Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free)? If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN US OR CANADA) OR (571)-272-1000.

/SE/

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/Richard Hjerpe/

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Supervisory Patent Examiner, Art Unit 2629